

## ABSTRACT OF THE DISCLOSURE

An aspect of the present invention provides a data transfer system that includes a plurality of requesters configured to send data transfer requests, the requesters configured to transfer data when authorized, a transfer controller configured to receive the data transfer requests from the requesters, the transfer controller configured to authorize one of the data transfer requests to perform arbitration for the data transfer requests, the transfer controller configured to send a transfer directive at a predetermined timing, a network configured to receive the transfer directive to transfer data from an authorized requester based on the transfer directive, and a plurality of memories including a plurality of modules, each of the modules having data input and output unit, the memories configured to receive the transfer directive to receive transfer data from the network based on the transfer directive.